

ANTIDEGRADATION TRIGGER

June 5 draft rule:

327 IAC 2-1.3-1(b) The antidegradation implementation procedures established by this rule apply to a nonexempt proposed new or increased discharge of a pollutant of concern to a surface water of the state that will result in a reasonable potential to exceed (RPE) a water quality standard. RPE will be determined by applying the procedures outlined in 327 IAC 5-2-11.1(h) for non Great Lakes system dischargers and 5-2-11.5 for Great Lakes system dischargers.

July 15 small workgroup meeting proposal:

327 IAC 2-1.3-1(b) The antidegradation implementation procedures established by this rule apply to a proposed new or increased loading of a pollutant of concern to a surface water of the state that is not exempt under section 4 of this rule.

Industry proposal:

As explained in greater detail below, the federal GLI regulations, SEA 431, the existing state GLI antidegradation implementation rules, and other states all use a brightline trigger for antidegradation review. For BCCs, the trigger is a deliberate action. For non-BCCs, the trigger is the need for a new or increased permit limit above the de minimis allowance.

Authority for a Deliberate Action (BCCs)/Permit Limit-De Minimis (Non-BCCs) Trigger for Antidegradation Review

EPA GLI rules (40 CFR Part 132, Appendix E):

Significant Lowering of Water Quality. A significant lowering of water quality occurs when there is a new or increased loading of any BCC from any regulated existing or new facility, either point source or nonpoint source for which there is a control document or reviewable action, as a result of any activity including, but not limited to:

- (1) Construction of a new regulated facility or modification of an existing regulated facility such that a new or modified control document is required;
- (2) Modification of an existing regulated facility operating under a current control document such that the production capacity of the facility is increased;
- (3) Addition of a new source of untreated or pretreated effluent containing or expected to contain any BCC to an existing wastewater treatment works, whether public or private;
- (4) A request for an increased limit in an applicable control document;
- (5) Other deliberate activities that, based on the information available, could be reasonably expected to result in an increased loading of any BCC to any waters of the Great Lakes System.

Please remember that the federal GLI regulations only address BCCs. Background on this provision can be found in the GLI SID (relevant portions attached). The SID includes a discussion of EPA's decision to change the proposed rule trigger for BCCs from "existing effluent quality" (EEQ) to a brightline trigger of a deliberate action (such as needing a new or increased permit limit). (*See e.g.*, "[U]nlike EEQ, the mechanism contained in the final Guidance does not expose dischargers to enforcement actions solely as a result to unusual effluent variability. Also, by linking antidegradation to actions taken by the discharge, there is no danger of a discharger being forced to undergo spurious antidegradation reviews to justify apparent increases in loadings.")

The SID also explains that the proposed rule addressed non-BCCs, and triggered antideg review based upon the need for a new or increased permit limit. (*See, e.g.*, "If a discharger was able to operate below permit limits such that an increased loading from the discharger would not exceed existing permit limits, no antidegradation review would be required. Similarly, if the proposed increase in permit limits was less than a de minimis level, no antidegradation review would be required.")

SEA 431:

IC 13-18-3-2(m) The procedures provided by rule ... must include the following:

(1) A definition of significant lowering of water quality that includes a de minimis quantity of additional pollutant load:

(A) for which a new or increased permit limit is required; and

(B) below which antidegradation implementation procedures do not apply.

Indiana Water Quality Coalition April 29, 2003 comment letter on IDEM March 1, 2003 first notice of rulemaking on antidegradation: SEA 431 provides that de minimis allowance applies only when a lowering will trigger the need for a new or increased permit limit. See SEA 431, section 17, codified at IC 13-18-3-2(m)(1) ("a de minimis quantity of additional pollutant load ... for which a new or increased permit limit is required...") (emphasis added). The rulemaking should clearly establish that antidegradation review is only triggered when a discharge needs a new or increased permit limit. This trigger concept already is articulated in 327 IAC 5-2-11.7, the antidegradation implementation procedures for OSRWs in the Great Lakes system. See 327 IAC 5-2-11.7(a)(1) and (2). This language should be incorporated in the implementation procedures for high quality waters and OSRWs throughout the State.

Current Indiana GLI rules:

327 IAC 5-2-11.3 High quality waters

BCCs: (b)(1)(A) Same as federal (see above)

Non-BCCs: (b)(1)(B) There is a new or increased permit limit for a substance that is not a BCC, from any existing or new facility, either point source or nonpoint source for which there is a permit or reviewable action, as a result of any activity, and the new or increased permit limit will result in both of the following:

(i) A calculated increase (calculated decrease for dissolved oxygen) in the ambient concentration of the substance outside of the designated mixing zone or volume, where applicable, in the receiving waterbody.

- (ii) A lowering of water quality that is greater than a de minimis lowering of water quality. [De minimis provisions follow]

327 IAC 5-2-11.7(a)(1) OSRWs

(1) This subdivision applies to an existing Great Lakes discharger discharging under a valid NPDES permit directly into a waterbody designated as an OSRW.

(A) This clause applies to a proposed discharge of a new pollutant or pollutant parameter for which the monthly average mass discharged would be greater than ten percent (10%) of the unused loading capacity, as defined in subsection (c)(5), for the pollutant or pollutant parameter.

- (i) As used in this clause, “new” means a new pollutant or pollutant parameter that is proposed to be discharged and was not being discharged by an existing NPDES permittee as of the effective date of this section.

- (ii) Except as provided in subsection (b), (c), (d), or (f), NPDES permit limits for the proposed new discharge of a pollutant or pollutant parameter shall be established as follows:

- (AA) Determine the representative background concentration of the pollutant or pollutant parameter in the receiving waterbody using section 11.4(a)(8) of this rule. This concentration value shall be converted to a mass value using the discharge flow determined using section 11.4(a)(9) of this rule.

- (BB) The mass value determined in subitem (AA) shall become the monthly average mass effluent limitation.

(B) This clause applies to a proposed increase in the discharge of any pollutant or pollutant parameter that is limited in an existing NPDES permit, which would cause an increase in the monthly average mass effluent limitation in the permit or the monthly average mass effluent limitation calculated under item (ii) when the permit contains an effluent limitation other than a monthly average mass effluent limitation for that pollutant or pollutant parameter. Except as provided in subsection (b), (c), (d), or (f), NPDES permit limits for the proposed increase in the discharge of a pollutant or pollutant parameter shall be established as follows:

- (i) Determine the representative background concentration of the pollutant or pollutant parameter in the receiving waterbody using section 11.4(a)(8) of this rule. This concentration value shall be converted to a mass value using the proposed increase in the discharge flow.

- (ii) Determine the monthly average mass limitation for the pollutant or pollutant parameter in the existing NPDES permit. If the existing permit does not contain a monthly average mass effluent limitation for the pollutant or pollutant parameter, the existing weekly average or daily maximum permit limit shall be converted into a monthly average value. If the existing permit does not contain a mass limit for the pollutant or pollutant parameter but does contain a concentration limitation, the concentration limitation shall be converted to a mass value using the discharge flow determined under section 11.4(a)(9) of this rule.

- (iii) Add the monthly average mass values determined in items (i) and (ii) together. This sum then becomes the new monthly average mass effluent limitation.

- (iv) Notwithstanding items (i) through (iii), if the proposed increase in mass is not a result of an increase in discharge flow, the commissioner shall calculate the monthly average mass effluent limitation on a case-by-case basis.
- (C) This clause applies to a proposed increase in the discharge of any pollutant or pollutant parameter that was being discharged as of the effective date of this section but is not limited in an existing NPDES permit, which would trigger the need for a monthly average mass effluent limitation for the existing discharge. Except as provided in subsection (b), (c), (d), or (f), NPDES permit limits for the proposed increase in the discharge of a pollutant or pollutant parameter shall be established as follows:
 - (i) Determine the representative background concentration of the pollutant or pollutant parameter in the receiving waterbody using section 11.4(a)(8) of this rule. This concentration value shall be converted to a mass value using the proposed increase in the discharge flow.
 - (ii) Determine the monthly average mass effluent limitation for the pollutant or pollutant parameter for the existing discharge.
 - (iii) Add the mass values determined in items (i) and (ii) together. This sum becomes the new monthly average mass effluent limitation for the pollutant or pollutant parameter.
 - (iv) Notwithstanding items (i) through (iii), if the proposed increase in mass is not a result of an increase in discharge flow, the commissioner shall calculate the monthly average mass effluent limitation on a case-by-case basis.